Science partnership to improve prediction of marine environment

26 April 2016 - As an island nation, the sea has a deep and profound effect on the lives of many communities across the UK. The seas around the UK influence our weather, climate and local environments.

Improving our understanding of the marine environment and how it affects us is the focus of a major collaboration programme bringing together top researchers from UK-based world-class organisations with an interest in understanding the marine environment in a more holistic way.

The National Partnership for Ocean Prediction (NPOP) - which comprises the Met Office, Plymouth Marine Laboratory , the Centre for Environment, Fisheries and Aquaculture Science and the National Oceanography Centre - is being formally announced at a three-day event in Bristol this week. The science partnership will bring together world-class expertise from the UK's leading marine and oceanographic research centres.

The scientific collaboration will provide an improved understanding and prediction of many aspects of the marine environment, such as fisheries, safety at sea, maritime operations, marine renewable energy, coastal flood warning, and the achievement and maintenance of good environmental status.

Scientists from the partner organisations will develop and promote the application of world-leading marine products and services to stakeholders, with a focus on national and public benefit. This will include the integration of models, observations and scientific understanding to produce the best information and advice about the marine environment, with rigorous quality assurance and traceability and engaging with stakeholders to understand their requirements and to maximise the beneficial use of marine products and services.

Professor Stephen de Mora, The National Partnership for Ocean Prediction Governing Board Chair and Chief Executive of Plymouth Marine Laboratory (PML), said: "We are delighted to be part of such an important partnership of leading marine science organisations, to help gain greater understanding of our changing marine environment into the future.

"The partnership will combine PML's world-class modelling expertise with the knowledge and specialisms of other leading research organisations, creating a hub for integrating ocean observations and models to provide high-quality information about the marine environment. By working together, we will develop useful products and services for use by the diverse range of stakeholders of the marine environment."

Professor Dame Julia Slingo OBE FRS, is the Met Office Chief Scientist. Speaking ahead of the launch, she said: "This partnership is a demonstration of the fundamental role that oceans play in the weather and climate system from local to global scales. It is critically important that the Met Office models, which we use to predict weather and climate risk, represent the fundamental role that the ocean places across time and space scales."

Prof Stuart Rogers, Chief Scientist at Cefas said: "Cefas are proud to contribute our world class applied science and advice to this important partnership that brings together the UK marine observing, modelling and forecasting communities. The partnership will help to deliver science excellence and increase the impact of products and services on marine operations, policy and management across the UK marine science community."

Professor Ed Hill OBE, the Executive Director of the National Oceanography Centre (NOC), said: "I am very pleased that the National Oceanography Centre is contributing to the national partnership for ocean prediction. Ocean predictions are one of the central means by which the understanding of ocean processes is translated into practical scientific benefit for society.

"NOC has very significant ocean modelling capability at both global and regional scales. These models encompass physical processes as well as ocean biogeochemistry and ecosystems, all of which are integrated into coupled climate and earth system models."

Predicting the Ocean: the Inaugural Science Workshop of the National Partnership for Ocean Prediction will be held from 25 - 27 April, 2016, at Engineers House, Bristol.

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